

12L8-GT

TWIN-PENTODE POWER AMPLIFIER

Heater	Coated Unipotential Cathode		
Voltage	12.6		a-c or d-c volts
Current	0.15		amp.

Direct Interelectrode Capacitances (Approx.):°

	Pentode Unit P_1		*Pentode Unit P_2*	
Grid to Plate	0.7		0.7	μμf
Input	5.0		5.0	μμf
Output	6.0		6.0	μμf
Grid to Grid		0.08		μμf
Plate to Plate		1.5		μμf
Grid P_1 to Plate P_2		0.2		μμf
Grid P_2 to Plate P_1		0.1		μμf

Maximum Overall Length	3-5/16"
Maximum Seated Height	2-3/4"
Maximum Diameter	1-5/16"
Bulb	T-9
Base	Intermediate Shell Octal 8-Pin

Pin 1 - Grid P_1
Pin 2 - Cathode, Suppressor P_1 & P_2
Pin 3 - Grid P_2
Pin 4 - Plate P_2
Pin 5 - Screen P_1 & P_2
Pin 6 - Heater
Pin 7 - Heater
Pin 8 - Plate P_1

KEY
BOTTOM VIEW (8BU)

Mounting Position — Any

For convenience, one pentode unit is identified as P_1; the other as P_2.

Maximum Ratings Are Design-Center Values

AMPLIFIER - Each Unit

Plate Voltage	180 max.	volts
Screen Voltage	180 max.	volts
Plate Dissipation	2.5 max.	watts
Screen Dissipation	1.0 max.	watt
D-C Heater-Cathode Potential	100 max.	volts

Typical Operation and Characteristics - Class A_1 Amplifier:

Plate Voltage	180	volts
Screen Voltage	180	volts
Grid Voltage (Grid No.1)	-9	volts
Peak A-F Grid Voltage	9	volts
Zero-Sig. Plate Cur.	13	ma.
Max.-Sig. Plate Cur.	13.5	ma.
Zero-Sig. Screen Cur.	2.8	ma.
Max.-Sig. Screen Cur.	4.6	ma.
Plate Resistance	0.16	megohm
Transconductance	2150	μmhos
Load Resistance	10000	ohms
Power Output (Total harmonic dist. 10%)	1.0	watt

° With no external shield.

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AVERAGE PLATE CHARACTERISTICS

EACH PENTODE UNIT

E_f = 12.6 VOLTS SCREEN VOLTS = 180

CONTROL-GRID VOLTS E_{c1} = 0

−3

−6

−9

−12

−15

E_{c1} = −18

I_b

I_{c2}

E_{c1} = 0

PLATE VOLTS

0 50 100 150 200 250 300 350 400

PLATE (I_b) OR SCREEN (I_{c2}) MILLIAMPERES

40 30 20 10 0

OCT. 1, 1943

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92C-6391